Atty Dkt No. HSJ9-2003-0022US1 Mintz Dkt No. 4800-0001

This listing of the claims replaces any and all prior versions and listings of claims in the application:

AMENDMENTS TO THE CLAIMS

1 (Withdrawn): A slider assembly comprising a plurality of sliders bonded by a debondable solid encapsulant, wherein the encapsulant is comprised of a silicon-based polymer, each slider has a surface that is free from the encapsulant, and the encapsulant-free surfaces are coplanar to each other.

2 (Withdrawn): The slider assembly of claim 1, having a contiguous planar surface comprised of at least one encapsulant region and containing the coplanar slider surfaces.

3 (Withdrawn): The slider assembly of claim 2, wherein the sliders are arranged in an array.

4 (Withdrawn): The slider assembly of claim 3, wherein the array is a rectilinear array.

5 (Withdrawn): The slider assembly of claim 4, wherein the sliders do not contact each other.

6 (Withdrawn): The slider assembly of claim 4, wherein the coplanar surfaces of the sliders are each an air-bearing surface.

7 (Withdrawn): The slider assembly of claim 6, further comprising a substrate in contact with the air-bearing surfaces.

8 (Withdrawn): The slider assembly of claim 7, wherein the substrate is comprised of a laminate of a flexible tape and an adhesive, wherein the adhesive is in contact with the airbearing surfaces.

9 (Withdrawn): The slider assembly of claim 8, wherein the adhesive is a pressure sensitive adhesive. Application Serial No. 10/611,418 Atty Dkt No. HSJ9-2003-0022US1
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10 (Withdrawn): The slider assembly of claim 8, wherein the adhesive preferentially

adheres to the tape over the air-bearing surfaces.

11 (Withdrawn): The slider assembly of claim 4, wherein the encapsulant is

mechanically stable for thermal cycling from about 20°C to about 100°C.

12 (Withdrawn): The slider assembly of claim 4, wherein the encapsulant is rigid.

13 (Withdrawn): The slider assembly of claim 4, wherein the encapsulant does not

substantially outgas under vacuum.

14 (Withdrawn): The slider assembly of claim 4, further comprising a carrier attached to

the encapsulant and/or at least one slider, wherein the carrier does not cover any of the coplanar

slider surfaces.

15 (Withdrawn): The slider assembly of claim 6, further comprising a resist layer on the

air-bearing surfaces, wherein the encapsulant is mechanically stable upon exposure to the resist

layer or any component thereof.

16 (Withdrawn): The slider assembly of claim 15, wherein the encapsulant is subject to

solvation by a solvent not found in the resist layer.

17 (Withdrawn): The slider assembly of claim 16, wherein the solvent dissolves the

silicon-based polymer.

18 (Withdrawn): The slider assembly of claim 17, wherein the solvent is comprised of

propylene glycol methyl ether acetate and/or N-methylpyrrolidinone.

19 (Withdrawn): The slider assembly of claim 4, wherein the silicon-based polymer is

prepared via in situ polymerization of organosilicon prepolymers.

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20 (Withdrawn): The slider assembly of claim 19, wherein the organosilicon prepolymers have an average molecular weight less than about 1,000 Daltons.

- 21 (Withdrawn): The slider assembly of claim 19. wherein the silicon-based polymer is prepared in via in situ polymerization using an polymeric amine catalyst.
 - 22 (Currently Amended): A method for forming a slider assembly, comprising:
- (a) arranging a plurality of sliders each having a surface such that the surfaces are coplanar to each other;
- (b) dispensing a silicon-based organosilicon material encapsulant fluid in a manner effective to fill gaps or recesses between the sliders without contacting the coplanar slider surfaces: and
- (c) subjecting the dispensed encapsulant fluid to a curing temperature of <u>from</u> about 150° C or more to about 200° C, which is effective for the fluid to form a readily debondable solid encapsulant comprising a silicon-based-polymer organosilicon material.
- 23 (Original): The method of claim 22, wherein step (a) comprises placing the sliders on a laminate of a flexible tape and an adhesive such that slider surfaces contact the adhesive.
- 24 (Original): The method of claim 23, wherein the adhesive is resistant or impervious to solvation by the encapsulant fluid.
- 25 (Original): The method of claim 22, wherein the encapsulant fluid has an initial viscosity of no more than about 800 centistokes.
- 26 (Original): The method of claim 25, wherein the initial viscosity is no more than about 500 centistokes.
- 27 (Original): The method of claim 26, wherein the initial viscosity is about 20 to about 200 centistokes.

28 (Original): The method of claim 22, wherein step (c) comprises removing solvent from the encapsulant fluid.

- 29 (Previously presented): The method of claim 22, wherein step (c) comprises effecting crosslinking and/or polymerization in the encapsulant fluid.
 - 30 (Withdrawn): A method for patterning an air-bearing surface of a slider, comprising:
- (a) applying a resist layer on an air-bearing surface of a slider, wherein at least a portion of the slider other than the air-bearing surface is encapsulated in a debondable solid encapsulant comprising a silicon-based polymer;
- (b) removing a portion of the resist layer to uncover a portion of the air-bearing surface in a patternwise manner: and
- (c) adding material to and/or removing material from the uncovered portion of the airbearing surface, thereby patterning the air-bearing surface of the slider,

wherein the encapsulant is mechanically stable upon exposure to any fluid employed in steps (a), (b), and/or (c).

- 31 (Withdrawn): The method of claim 30, further comprising, after step (a) and before step (b), exposing the resist layer to photons in the patternwise manner.
- 32. (Previously presented): The method of claim 22, wherein the solid encapsulant does not substantially outgas under vacuum.
- 33. (Previously presented): The method of claim 29, wherein step (c) comprises *in situ* polymerization of organosilicon prepolymers.
- 34. (Currently Amended): The method of claim 22, wherein the silicon-based polymer organosilicon material has comprises one or more members of the group consisting of phenyl, alkyl, and fluoroalkyl substituents.

35. (Previously presented): The method of claim 29, wherein a polymeric catalyst containing pendant amino-functionalities is employed in step (c).

- 36. (Cancelled).
- 37. (Currently Amended): The method of claim 22, further comprising a step [[(e)]] (d) of debonding the encapsulant by means of a solvent comprising propylene glycol methyl ether acetate or N-methylpyrrolidinone.
- 38. (Currently Amended): The method of claim 22, wherein the silicon-based polymer organosilicon material comprises a member selected from the group consisting of a silicane, a silicate, and a silicon-containing pendent moiety.
- (Currently Amended): The method of claim 22, wherein the coplanar surface of the sliders are free from encapsulant.